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09/960,261	09/20/2001	Mark Myatt	500.819US1	5390
27530 7590 04/19/2007 NELSON MULLINS RILEY & SCARBOROUGH, LLP 1320 MAIN STREET, 17TH FLOOR COLUMBIA, SC 29201			EXAMINER KOHUT, DAVID M	
			ART UNIT	PAPER NUMBER
			3626	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/960,261

Applicant(s)

MYATT ET AL.

Examiner

David M. Kohut, Esq.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. In the amendment filed 5 February 2007, the following has occurred: claims 1-12, 14-31, and 33-39 have been amended.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 1, 3, 8, 20, 22, 27, and 39, recite "...having a pre-paid balance, wherein the reservation amount is always less than the pre-paid balance...". It is unclear as to what "always" is in reference to, since there is only one reservation amount. In addition, the recited clause "...preventing exhaustion..." is intended use, and is therefore, not given patentable weight.
5. As per claims 2, 4-7, 9-19, 21, 23-26, and 28-37 do not cure the deficiencies set forth in claims 1, 3, 8, 20, 22, 27, and 39, and are therefore rejected for the same reasons.
6. Claims 1, 3, 20, 22, and 39, contain a wherein clause that appears to require that the calculating step is based on event data and the pre-paid balance. However, it is unclear how this is completed.
7. As per claims, 2, 4-7, 21, 23-26, and 28-37 do not cure the deficiencies set forth in claims 1, 3, 20, 22, and 39, and are therefore rejected for the same reasons.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 8-19 and 27-38 are rejected under 35 U.S.C. 101 because the claimed invention does not produce a "useful, concrete and tangible result." *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368, 1373; 47 USPQ2d 1596, 1601-02.

10. Claims 8-19 have not been previously rejected for lack of utility, but rather for a failure to produce a tangible result. Merely calculating a reservation amount is not a practical application of the method.

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-4, 8-10, 12-13, 15-16, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al., U.S. Patent No. 5,995,822.

13. As per claim 1, Smith et al. teaches a method of receiving event data corresponding to a first event, i.e. making a set up request such as an incoming or

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outgoing call (see column 5, lines 45-47); calculating a reservation amount based on the event data, i.e. calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 3, lines 56-58); and reserving the reservation amount against the prepaid account having a pre-paid balance, wherein the reservation amount is always less than the pre-paid balance thereby preventing exhaustion of the pre-paid balance by the first event, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). For all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

14. As per claim 2, Smith et al. teaches the method of claim 1 as described above. Smith et al. further teaches determining a service unit associated with the first event, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); converting the reservation amount into a quantity of service units, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); sending the service unit quantity to a device generating the event data, i.e. a timer is started to keep track of the minutes that have been allocated to the call (see column 6, lines 42-44).

15. As per claim 3, Smith et al. teaches the method of claim 2 as described above. Smith et al. further teaches a method for reducing the service unit quantity commensurate with each service unit used during the first event, i.e. assuming that the value "A" was the original amount in the account, there would be "A-a" units of value left

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in the account the first time step 114 is completed, then after the deduction of another "a" units the second time step 114 is completed, there would be "A-2a" units of value left in the account (see column 7, lines 7-12); receiving a second event corresponding to the depletion of the service unit quantity, i.e. call is continued until the timer times out (see column 7, line 4); calculating a second reservation amount, i.e. the method proceeds back to step 106 to be repeated and calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 7, lines 5-6 and column 3, lines 56-58); and reserving the second reservation amount against the pre-paid account, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

16. As per claim 4, Smith et al. teaches the method of claim 2 as described above. Smith et al. further teaches the method where the service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of " $\alpha$ " minutes (see column 6, lines 7-8).

17. As per claim 8, Smith et al. teaches the method of receiving a first wireless event, i.e. a mobile telephone call set up (see column 3, lines 39 and 58); calculating a first reservation amount based on a duration initially set to a default service unit quantity, i.e. calculates an amount "a" that represents a call of predetermined duration (see column 6, lines 7-8); fetching an available credit in a pre-paid account, i.e. accesses the pre-

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paid account information for the calling subscriber (see column 6, lines 10-11); comparing the first reservation amount with the available credit, i.e. determine if there is a value in that account which is large enough for the call to be started (see column 6, lines 11-13); if the first reservation amount is less than the available credit, then authorizing the event for the default service unit quantity, i.e. the SSF then sets up and connects the call to the called party (see column 6, lines 50-51); if not, then performing the task of: adjusting the default service unit quantity, i.e. calculates the amount of calling duration "δ" that corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17); recalculating the first reservation amount based on the adjusted default service unit quantity, wherein the recalculated reservation amount is always less than the available credit thereby preventing exhaustion of the available credit by the first wireless event i.e. deducts this corresponding value in that account from the SDF database (see column 6, lines 30-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

18. As per claim 9, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches comparing the adjusted service unit quantity to a minimum service unit quantity, i.e. SCF determines whether the calling duration "δ" calculated at step 110 is at least greater than or equal to a predetermined minimum call duration (see column 6, lines 17-20); sending an authorization failure if the adjusted service unit quantity is less than the minimum service unit quantity, i.e. if not, at step 112, SCF 12

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orders the SSF 20 to send an "announcement" message to the calling subscriber that the cost of the call is not covered by the pre-paid account, and the call set up attempt is disconnected (see column 6, lines 21-25). Examiner is interpreting the "service unit quantity" to be either the default or the adjusted service unit quantity.

19. As per claim 10, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches adjusting at least one of the default service unit quantity and the adjusted default service unit quantity by multiplying at least one of the default service unit quantity and the adjusted default service unit quantity by a pre-determined percentage, i.e. calculate the amount of calling duration " $\delta$ " that corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17). The pre-determined percentage in Smith et al. is 100% of the remaining balance.

20. As per claim 12, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches determining whether at least one of the first reservation amount and the recalculated reservation amount is appropriate based on a comparison expressed as: available credit is greater than the reservation amount, i.e. determine if there is a value in that account which is large enough for the call to be started (see column 6, lines 12-13); and the available credit is less than or equal to the CreditLowWatermark or the reservation amount is less than the available credit times the CreditPerCallPercentage, i.e. the calling duration " $\delta$ " is at least greater than or equal to a predetermined minimum call duration " $\gamma$ " (see column 6, lines 18-20). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to



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a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

21. As per claim 13, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches determining a new reservation amount according to the formula if the available credit times the CreditPerCallPercentage is less than or equal to the Credit LowWaterMark, then the new reservation amount equals the CreditLowWaterMark, i.e. if the SCF determines that the calling duration " $\delta$ " calculated is at least greater than or equal to the predetermined minimum call duration " $\gamma$ ", then the remaining value " $d$ " of the account is deducted from the account (see column 6, lines 52-56); else the new reservation amount is equal to the available credit times the CreditPerCallPercentage, i.e. if the value in the account is greater than or equal to the value " $a$ " corresponding to the predetermined duration of a call, the SCF deducts this corresponding value in that account from the SDF database (see column 6, lines 26-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

22. As per claim 15, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches the method wherein at least one of the first reservation amount and the recalculated reservation amount is determined by a rating engine that receives at least one of the default service unit quantity and the adjusted default service unit quantity and applies a tariff to at least one of the default service unit quantity and

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the adjusted default service unit quantity, i.e. the SCF calculates an amount "a" that represents a call of predetermined duration (see column 6, lines 7-8).

23. As per claim 16, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches the method wherein at least one of the default service unit quantity and the adjusted default service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of " $\infty$ " minutes (see column 6, lines 7-8).

24. As per claim 39, Smith et al. teaches a system comprising a rating engine, i.e. the system contains an Intelligent Network Service Control Function (see column 1, lines 28 and 52); a balance manager operative to maintain a database having accounts, said accounts having an account balance, i.e. a subscription for each pre-paid customer is stored in a subscriber database in a system's IN node which contains information such as the number of charging units to be used for the payment of a call (see column 1, lines 42-43); wherein the balance manager is operative to perform the task of: receiving event data corresponding to a first event, i.e. making a set up request such as an incoming or outgoing call (see column 5, lines 45-47); calculating a reservation amount based on the event data, i.e. calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 3, lines 56-58); and reserving the reservation amount against a prepaid account having a pre-paid balance, wherein the reservation amount is always less than the pre-paid balance thereby preventing exhaustion of the pre-paid balance by the first event i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). For all

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intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

25. Claims 8 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Seiderman, U.S. Patent No. 5,550,897.

26. As per claim 11, Seiderman teaches the method of claim 8, as described above, but only up to the portion where a wireless event is received. After that point, claim 11 requires that the method determine whether the event is free and does not continue on with any other elements of claim 8. In fact, claim 11 specifically does not allow the reservation amount to be compared to the available credit. Therefore, Seiderman teaches receiving a wireless event, i.e. prompt the user to receive information regarding the making of telephone calls (see column 8, lines 40-44); and determining if the first wireless event is a free event, i.e. determine whether the user has activated one of the free call interrupt controls (see column 8, lines 50-51); and, if so, returning a successful authorization prior to comparing the first reservation amount with the available credit, i.e. permit the user to bypass the credit verification features of the system and directly call a predetermined telephone number or the 911 emergency operator (see column 9, lines 4-8).

***Claim Rejections - 35 USC § 103***

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

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subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. Claims 5-7, 17-19, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Dedrick, U.S. Patent No. 6,016,509.

29. As per claim 5, Smith et al. teaches a method of claim 2, as described above. However, Smith et al. does not explicitly teach the search unit quantity comprising a storage unit quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

30. As per claim 6, Smith et al. teaches the method of claim 2, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to

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incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

31. As per claim 7, Smith et al. teaches the method of claim 2, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for information which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

32. As per claim 17, Smith et al. teaches the method of claim 8, as described above. However, Smith et al. does not explicitly teach the search unit quantity comprising a storage unit quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

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33. As per claim 18, Smith et al. teaches the method of claim 8, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

34. As per claim 19, Smith et al. teaches the method of claim 8, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for information which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

35. As per claim 24, Smith et al. teaches the method of claim 21, as described above. However, Smith et al. does not explicitly teach the search unit quantity

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comprising a storage unit quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

36. As per claim 25, Smith et al. teaches the method of claim 21, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

37. As per claim 26, Smith et al. teaches the method of claim 21, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to

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one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for information which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

38. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Berglund, U.S. Patent No. 6,122,256.

39. As per claim 14, Smith et al. teaches the method of claim 8 as described above. However, Smith et al. does not explicitly teach what happens if a rating algorithm counter exceeds a pre-determined count. Berglund does teach setting the default service unit quantity to a minimum default service unit quantity when a rating algorithm counter exceeds a pre-determined count, i.e. when the loop counter reaches a limit value indicating that the current loop status has differed from the established value in the Network Wrap Mode for several cycles, the Network Wrap Mode is changed to reflect the new state as indicated by the values of wrapfwd and wraprev (see column 12, lines 37-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of preventing spurious and intermittent network communication failures (see column 12, lines 34-36 of Berglund).



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40. Claims 20-23, 27-29, 31-32, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Danneels et al., U.S. Patent No. 6,272,472.

41. As per claim 20, Smith et al. teaches a method of receiving event data corresponding to a first event, i.e. making a set up request such as an incoming or outgoing call (see column 5, lines 45-47); calculating a reservation amount based on the event data, i.e. calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 3, lines 56-58); and reserving the reservation amount against the prepaid account, wherein the reservation amount is always less than the pre-paid balance thereby preventing exhaustion of the pre-paid balance by the first event, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). For all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61). However, Smith et al. does not explicitly teach providing these executable instructions on a machine-readable medium.

Danneels et al., however, teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46.) In addition, Danneels et al. teaches that the programs are storable on a machine-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to

incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

42. As per claim 21, Smith et al. teaches the method of claim 20 as described above. Smith et al. further teaches determining a service unit quantity based on the reservation amount, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); and sending the service unit quantity to a device generating the event data, i.e. a timer is started to keep track of the minutes that have been allocated to the call (see column 6, lines 42-44).

43. As per claim 22, Smith et al. teaches the method of claim 20 as described above. Smith et al. further teaches a method for reducing the service unit quantity commensurate with each service unit used during the first event, i.e. assuming that the value "A" was the original amount in the account, there would be "A-a" units of value left in the account the first time step 114 is completed, then after the deduction of another "a" units the second time step 114 is completed, there would be "A-2a" units of value left in the account (see column 7, lines 7-12); receiving a second event corresponding to the depletion of the service unit quantity, i.e. call is continued until the timer times out (see column 7, line 4); calculating a second reservation amount, i.e. the method proceeds back to step 106 to be repeated and calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 7, lines 5-6 and column 3, lines 56-58); determining a second service unit quantity based on the second reservation amount, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); and reserving the second

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reservation amount against the pre-paid account, wherein the second reservation amount is always less than the pre-paid balance thereby preventing exhaustion of the pre-paid balance by the second event, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.).

44. As per claim 23, Smith et al. teaches the method of claim 21 as described above. Smith et al. further teaches the method where the service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of " $\infty$ " minutes (see column 6, lines 7-8).

45. As per claim 27, Smith et al. teaches the method of receiving a first wireless event, i.e. a mobile telephone call set up (see column 3, lines 39 and 58); calculating a first reservation amount based on a duration initially set to a default service unit quantity, i.e. calculates an amount "a" that represents a call of predetermined duration (see column 6, lines 7-8); fetching an available credit in a pre-paid account, i.e. accesses the pre-paid account information for the calling subscriber (see column 6, lines 10-11); comparing the first reservation amount with the available credit, i.e. determine if there is a value in that account which is large enough for the call to be started (see column 6, lines 11-13); if the first reservation amount is less than the available credit, then authorizing the event for the default service unit quantity, i.e. the

SSF then sets up and connects the call to the called party (see column 6, lines 50-51); if not, then performing the task of: adjusting the default service unit quantity, i.e. calculates the amount of calling duration "δ" that corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17); recalculating the first reservation amount based on the adjusted default service unit, wherein the recalculated reservation amount is always less than the available credit thereby preventing exhaustion of the available credit by the first wireless event, i.e. deducts this corresponding value in that account from the SDF database (see column 6, lines 30-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.). However, Smith et al. does not explicitly teach providing these executable instructions on a machine-readable medium. Danneels et al., however, teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46.) In addition, Danneels et al. teaches that the programs are storable on a machine-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Goodwin. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

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46. As per claim 28, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches comparing the adjusted default service unit quantity to a minimum service unit quantity, i.e. SCF determines whether the calling duration "δ" calculated at step 110 is at least greater than or equal to a predetermined minimum call duration (see column 6, lines 17-20); sending an authorization failure if the adjusted default service unit quantity is less than the minimum default service unit quantity, i.e. if not, at step 112, SCF 12 orders the SSF 20 to send an "announcement" message to the calling subscriber that the cost of the call is not covered by the pre-paid account, and the call set up attempt is disconnected (see column 6, lines 21-25). Examiner is interpreting the "service unit quantity" to be either the default or the adjusted service unit quantity.

47. As per claim 29, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches adjusting at least one of the default service unit quantity and the adjusted default service unit quantity by multiplying at least one of the default service quantity and the adjusted default service unit quantity by a pre-determined percentage, i.e. calculate the amount of calling duration "δ" that corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17). The pre-determined percentage in Smith et al. is 100% of the remaining balance.

48. As per claim 31, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches determining whether at least one of the first reservation amount and the recalculated reservation amount is appropriate based on a comparison expressed as: the available credit is greater than the reservation amount, i.e. determine

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if there is a value in that account which is large enough for the call to be started (see column 6, lines 12-13); and the available credit is less than or equal to the CreditLowWatermark or the reservation amount is less than the available credit times the CreditPerCallPercentage, i.e. the calling duration " $\square$ " is at least greater than or equal to a predetermined minimum call duration " $\square$ " (see column 6, lines 18-20). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.).

49. As per claim 32, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches determining a new reservation amount according to the formula if the available credit times the CreditPerCallPercentage is less than or equal to the Credit LowWaterMark, then the new reservation amount equals the CreditLowWaterMark, i.e. if the SCF determines that the calling duration " $\square$ " calculated is at least greater than or equal to the predetermined minimum call duration " $\square$ ", then the remaining value "d" of the account is deducted from the account (see column 6, lines 52-56); else the new reservation amount is equal to the available credit times the CreditPerCallPercentage, i.e. if the value in the account is greater than or equal to the value "a" corresponding to the predetermined duration of a call, the SCF deducts this corresponding value in that account from the SDF database (see column 6, lines 26-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial

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account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.).

50. As per claim 34, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches the method where a rating engine receives at least one of the default service unit quantity and the adjusted default service unit quantity and applies a tariff to at least one of the default service unit quantity and the adjusted default service unit quantity, i.e. the SCF calculates an amount "a" that represents a call of predetermined duration (see column 6, lines 7-8).

51. As per claim 35, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches the method where at least one of the default service unit quantity and the adjusted default service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of " $\infty$ " minutes (see column 6, lines 7-8).

52. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Seiderman, U.S. Pat. No. 5,550,897 and Dedrick, U.S. Patent No. 6,016,509.

53. As per claim 30, Smith et al. teaches the method of claim 27 as described above. In addition, Seiderman teaches receiving a wireless event, i.e. prompt the user to receive information regarding the making of telephone calls (see column 8, lines 40-44); and determining if the first wireless event is a free event, i.e. determine whether the user has activated one of the free call interrupt controls (see column 8, lines 50-51); and, if so, return a successful authorization prior to comparing the first reservation

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amount with the available credit, i.e. permit the user to bypass the credit verification features of the system and directly call a predetermined telephone number or the 911 emergency operator (see column 9, lines 4-8). However, neither Smith et al. nor Seiderman explicitly teach providing these executable instructions on a machine-readable medium. Danneels et al., however, teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46.) In addition, Danneels et al. teaches that the programs are storable on a machine-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Goodwin. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

54. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Dedrick, U.S. Patent No. 6,016,509 and Danneels et al., U.S. Patent No. 6,272,472.

55. As per claim 36, Smith et al. teaches a method of claim 27, as described above. However, Smith et al. does not explicitly teach the search unit quantity comprising a storage unit quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the



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system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

56. As per claim 37, Smith et al. teaches the method of claim 27, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

57. As per claim 38, Smith et al. teaches the method of claim 27, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for information

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which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

58. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Berglund, U.S. Patent No. 6,122,256 and Danneels et al., U.S. Patent No. 6,272,472.

59. As per claim 33, Smith et al. and Danneels et al. teach the method of claim 27 as described above. However, Smith et al. does not explicitly teach what happens if a rating algorithm counter exceeds a pre-determined count. Berglund does teach setting the default service unit quantity to a minimum default service unit quantity when a rating algorithm counter exceeds a pre-determined count, i.e. when the loop counter reaches a limit value indicating that the current loop status has differed from the established value in the Network Wrap Mode for several cycles, the Network Wrap Mode is changed to reflect the new state as indicated by the values of wrapfwd and wraprev (see column 12, lines 37-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of preventing spurious and intermittent network communication failures (see column 12, lines 34-36 of Berglund).

### ***Response to Arguments***

60. In the remarks filed 5 February 2007, Applicant argues in substance that (1) Smith fails to teach, disclose, or suggest a method which prevents complete exhaustion or reservation of the balance of a pre-paid account; (2) Seiderman fails to teach,

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disclose, or suggest a method analyzing the balance of a pre-paid account or method that prevents the exhaustion or reservation of the entire balance of the pre-paid account when authorizing an event; and (3) Smith in view of Danneels does not suggest, teach, or disclose a method that reserves an amount against a pre-paid account in order to authorize use of a cellular device without exhaustion or reservation of the entire balance of a pre-paid account.

61. In response to Applicant's argument (1), the Examiner respectfully submits that Smith does in fact teach a method which prevents complete exhaustion or reserves a balance of a pre-paid account, i.e. in accordance with the invention, since the value of the pre-paid account is **less than** or equal to the actual current value, a pre-paid subscriber can have a plurality of parallel (simultaneous) calls or other transactions ongoing, with no risk that these calls will not be covered by the amount in the pre-paid account (see column 4, lines 56-62 of Smith et al.). Smith teaches that if there is not enough value in the pre-paid account for a call, then it is determined if there is enough in the account to make a call of a minimum duration (see Figure 2 of Smith et al.), and if there is not enough value, a disconnect announcement is given and the call is not made until additional funds are deposited into the pre-paid account (see Figure 2 of Smith et al.). The implementation of the invention of Smith does not prevent authorization of a second event by another joint account user or a subsequent or concurrent event of a different type by the same user, as Applicant suggests. It is the lack of funds available in the pre-paid account that prevents it. In addition, Applicant states that Smith discloses a method in which a default amount is deducted from the pre-paid account

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balance regardless of whether the amount is appropriate (see page 19, lines 10-12 of Applicant's remarks). However, Smith discloses that the amount withdrawn is large enough to cover the cost for a call of **typical duration** (see column 4, lines 36-37 of Smith). Examiner interprets a call of typical duration to be an appropriate amount. Therefore, Examiner does not find any of Applicant's arguments regarding Smith to be persuasive.

62. In response to Applicant's argument (2), Applicant incorrectly interprets Examiner's use of the Seiderman reference to address the reservation of an amount against a balance of a pre-paid account when authorizing an event. Examiner merely uses the Seiderman reference to show that it is well known in the art to allow "free" calls without a deduction from a pre-paid account (see column 8, lines 50-51, and column 9, lines 4-8 of Seiderman et al.). Therefore, Examiner does not find any of Applicant's arguments regarding Seiderman to be persuasive.

63. In response to Applicant's argument (3), Applicant incorrectly interprets Examiner's use of the Danneels reference to address a system which prevents complete exhaustion or reservation of the balances of a pre-paid account. Examiner uses the Danneels reference to show that it is well known in the art to provide executable instructions for a method on a machine-readable medium (see column 2, lines 46-49 of Danneels et al.). Examiner provides appropriate motivation to combine the methods of Smith and Danneels, and therefore, Examiner does not find any of Applicant's arguments regarding Danneels to be persuasive.

***Conclusion***

64. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

65. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

66. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to David M. Kohut, Esq. whose telephone number is 571-270-1369. The Examiner can normally be reached M-Th 730-5 w/1<sup>st</sup> Fri off. 2<sup>nd</sup> Fri 730-4.


67. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Joseph Thomas can be reached at 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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68. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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4/15/2007

  
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